

C1
a CPU which executes the user program and the write control program,

wherein the electrically programmable ROM and the memory are disposed at mutually different address positions,

wherein the user program includes a first instruction which changes a process of the CPU executing the user program to a process that controls a writing of the electrically programmable ROM based on the write control program stored in the memory, and

a data bus coupled to the CPU, to the electrically programmable ROM and to the memory; and

an address bus coupled to the CPU, to the electrically programmable ROM and to the memory, and

wherein the write control program includes a second instruction which returns the CPU to the process based on the executing of the user program stored in the electrically programmable ROM after completion of the process that controls the writing of the electrically programmable ROM.

Sub 2x3
C2
24. (Amended) A microcomputer comprising:

an electrically programmable read only memory (ROM) which has a first area to store a first program therein and a second area to store data therein;

a memory which stores a second program for controlling a writing to the electrically programmable ROM; [and]

a central processing unit which executes the first program and the second program,

C2 a data bus coupled to the central processing unit, to the electrically programmable ROM and to the memory; and

an address bus coupled to the central processing unit, to the electrically programmable ROM and to the memory,

wherein each of the ROM and the memory are allocated in mutually different addresses,

wherein the first program includes an instruction which changes a process of the CPU to a process that controls a writing of the ROM based on the second program stored in the memory, and

wherein the second program includes an instruction which returns the CPU to the process based on the first program in the ROM after completion of the process that controls the writing of the ROM.

Sub 24
C3 28. (Amended) A method of writing data into an electrically erasable programmable ROM (EEPROM) under control of a processing unit, wherein the EEPROM and the processing unit are in a semiconductor substrate, the method comprising the steps of:

executing a first program in the EEPROM by the processing unit;

changing a process of the processing unit executing the first program to a process for executing a second program stored in a memory, which is formed in the semiconductor substrate, when the processing unit executes an instruction in the first program;

executing the second program by the processing unit to perform writing of data to the EEPROM by the processing unit executing the second program; and

changing the process of the processing unit executing the second program to the process for executing the first program when the processing unit executes an instruction in the second program,

wherein the memory and the EEPROM are allocated in mutually different addresses in one address space.

Sub 26
CU 30. (Amended) A method of writing data into an electrically programmable ROM under control of a CPU, wherein the electrically programmable ROM and the CPU are in a semiconductor substrate, the method comprising the steps of:

executing a first program in the electrically programmable ROM by the processing unit;

changing a process of the CPU executing the first program to a process for executing a second program stored in